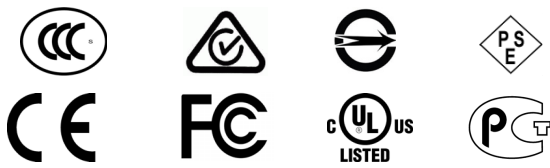


# Technical Data Sheet

## RRC-SMB-MBC – RRC SMBUS Mini Battery Charger



### 50 Watt SMBUS Desktop Mini Battery Charger for Smart Batteries

#### Features:

- Single bay charger
- For the standard battery form factors 2040, 2040-2, 2054, 2057 or smart batteries with a similar footprint
- Optimized charging process for RRC batteries:
  - Longer cycle life
  - Faster charging
- Simple operation – Plug and Play
- External power supply for worldwide use
- Country specific AC input cables available

#### Applications:

- Standard charging station for mobile devices used in medical, industrial and consumer markets

### Specification RRC-SMB-MBC

Input	
Voltage	24V nom.
Current	2300mA nom.
Power	55W

Environmental	
Cooling	convection cooled
Temperature	Operating: 0°C to 40°C Non-operating: -10°C to 70°C
Pressure & Altitude	Operating: 1060hPa to 795hPa -382m to 2000m Non-operating: 1060hPa to 572hPa -382m to 4570m
Humidity	5% to 95% r.H., non-condensing

Output	
Voltage range	0 - 17.4VDC
Current range	0 – 4.8A
Voltage tolerance <sup>(1)</sup>	±1% max.
Current tolerance <sup>(1)</sup>	±10% max. @1A, ±3% max. @4A
Protection	Short circuit Over temperature shutdown Input-/output over current

General	
Efficiency <sup>(2)</sup>	~95% at 100% load
Indicator	Multi-color LED (green, red, orange)
Battery types	Standard battery form factors 2040, 2040-2, 2054, 2057 or smart batteries with a similar footprint
Green procurement	RoHS 2011/65/EU WEEE 2012/19/EU Chinese RoHS

LED Indications	
One time Red/Orange/Green	Selftest: Charger is ready for use.
Red/Green blinking	Battery recognition and initialization.
Orange light	The inserted battery is of the correct type and is currently being charged.
Green light	The battery is charged and can be removed for use.
Red blinking	The battery is too hot or too cold to be charged without damage. If the battery is too cold it will be charged as soon as it has warmed up sufficiently. If the battery is too hot it should be removed to cool down.
Red light	The battery is damaged or it is a conventional battery which cannot be recharged.

Charger Mechanical Details	
Housing dimensions (LxWxH)	120 x 64 x 43mm
Weight	110g (excluding power supply)

#### Notes:

1. Total regulation tolerance includes initial set accuracy, line and load regulation
2. Power losses of input and output cables are not considered here.



# Technical Data Sheet

## RRC-SMB-MBC – RRC SMBUS Mini Battery Charger



Safety & EMC		In combination with specified external AC/DC power supply
Regulatory approvals	Europe	CE
Electromagnetic Emissions	Europe	EN55011, EN55022, level B
	USA	FCC15 class B
Electromagnetic Immunity	ESD immunity	EN/IEC61000-4-2
	Electromagnetic field immunity	EN/IEC61000-4-3
	EFT / Burst	EN/IEC61000-4-4
	Surge	EN/IEC61000-4-5
	Conducted Immunity	EN/IEC61000-4-6
	Magnetic Fields	EN/IEC61000-4-8
	Voltage dips, short instrumentations & voltage variations	EN/IEC61000-4-11
	Immunity characteristics	EN55024

### Specification external AC/DC power supply

Input	
Voltage range	100 - 240VAC
Current	1.5A max.
Stand by power	No load < 0.5W @ 230 VAC

Output	
Voltage range	24VDC
Power	65W max.
Current range	2.7A
Protection	Over voltage, Short circuit

Environmental	
Temperature	Operating: 0°C to 40°C
	Non-operating -10°C to 70°C

General	
Efficiency	California's Energy Efficiency Level V
Line regulation	±1%
Ripple & Noise	240mV (p-p)

Power Supply Mechanical Details	
Standard output connector	DC barrel jack
Housing dimensions (LxWxH)	114 x 47 x 33mm
Weight	225g

Safety & EMC & Approvals		
Approvals	Europe	CE
	International	CB
	USA/Canada	cULus
	Australia	RCM
	Russia	GOST
	Taiwan	BSMI
	China	CCC
	Japan	PSE



Germany/Headquarters	USA	Hong Kong	China
RRC power solutions GmbH Technologiepark 1 D-66424 Homburg / Saar	RRC power solutions Inc. 18340 Yorba Linda Blvd., Suite 107-437 Yorba Linda, CA 92886-4104	RRC power solutions Ltd. 9/F Park Tower, 15 Austin Road Tsim Sha Tsui, Kowloon, Hong Kong	RRC power solutions Ltd. Room 520, Yuanlin Building, Aiguo Road No. 3066, Luohu District, Shenzhen 518021
Tel.: +49 6841 98090 Fax: +49 6841 9809280 Email: sales@rrc-ps.de Web: www.rrc-ps.de	Tel.: +1 714 777 3604 Fax: +1 714 777 3658 Email: usa@rrc-ps.com Web: www.rrc-ps.com	Tel.: +852 2376 0106 Fax: +852 2376 0107 Email: hkrrc@rrc-ps.cn Web: www.rrc-ps.com	Tel.: +86 755 8374 1908 Fax: +86 755 8374 1861 Email: hkrrc@rrc-ps.cn Web: www.rrc-ps.com

# TEXIM EUROPE

Partner in Electronic Components & Supply Chain Solutions



## The Netherlands

Elektrostraat 17  
NL-7483 PG Haaksbergen  
Tel: +31 (0)53 573 33 33  
Fax: +31 (0)53 573 33 30  
nl@texim-europe.com



## Denmark

Sdr. Jagtvej 12  
DK-2970 Hørsholm  
Tel: +45 88 20 26 30  
Fax: +45 88 20 26 39  
nordic@texim-europe.com



## Belgium

Gentsesteenweg 1154-C22  
Chaussée de Gand 1154-C22  
B-1082 Brussel / Bruxelles  
Tel: +32 (0)2 462 01 00  
Fax: +32 (0)2 462 01 25  
belgium@texim-europe.com



## United Kingdom

St. Mary's House, Church Lane  
Carlton Le Moorland  
Lincoln LN5 9HS  
Tel: +44 (0)1522 789 555  
Fax: +44 (0)845 299 22 26  
uk@texim-europe.com



## Germany

Bahnhofstrasse 92  
D-25451 Quickborn  
Tel: +49 (0)4106 627 07-0  
Fax: +49 (0)4106 627 07-20  
germany@texim-europe.com



## Germany

Martin-Kollar-Strasse 9  
D-81829 München  
Tel: +49 (0)89 436 086-0  
Fax: +49 (0)89 436 086-19  
germany@texim-europe.com



## Austria

Warwitzstrasse 9  
A-5020 Salzburg  
Tel: +43 (0)662 216026  
Fax: +43 (0)662 216026-66  
austria@texim-europe.com

## Texim Europe B.V.

Elektrostraat 17  
NL-7483 PG Haaksbergen  
Tel: +31 (0)53 573 33 33  
info@texim-europe.com  
www.texim-europe.com

